



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

OFFICE OF
AIR AND RADIATION

MAY 17 2012

Mr. Kevin Brown
Engine Control Systems
83 Commerce Valley Drive East
Thornhill, Ontario
L3T 7T3, Canada

Dear Mr. Brown:

The U.S. Environmental Protection Agency (EPA) has reviewed your request for an extension of the current Engine Control Systems (ECS) Purifilter Plus M to include additional on-highway EGR and non-EGR engines. The Purifilter Plus M was originally verified for certain engines manufactured by International Truck and Engine Corporation. This technology incorporates a catalyzed silicon carbide wall-flow filter with passive regeneration capabilities and an electrical heating panel for periodic active regeneration while parked. The Purifilter Plus M also includes an electronic logger to monitor exhaust backpressure and temperature with an alarm system that alerts fleet operators when active regeneration is needed or when the filter must be cleaned.

Based on our evaluation of your application, verification test data, and additional information provided, EPA hereby verifies that this technology reduces emissions of certain criteria pollutants by the percentages described in the table below, for the engine families enclosed in Table A.

Technology	Engine Model/Application	Fuel, Max Sulfur (ppm)	Reductions (%)			
			PM	NO _x	HC	CO
Purifilter Plus M (diesel particulate filter on the engine, electrical panel for active regeneration at the garage/maintenance yard)	Highway; light, medium, and heavy heavy-duty EGR and non-EGR engines, not originally certified or equipped with DPF, originally manufactured from 1994-2010 and listed in Table A enclosed with this letter.	15	90	N/A	30	75

This technology is now approved for use on the engines and/or vehicles detailed in the enclosure provided all of the operating criteria are met as described below:

1. As there may be variations from application to application, data logging and a review of actual vehicle operating conditions is required to ensure Purifilter Plus M compatibility.

The installer must provide the fleet owners and/or operators with a copy of the pre- and post-installation checklists, as well as copies of the data logging results and recommended regeneration schedules. Fleet owners/operators are responsible for adhering to the recommended regeneration schedule. At a minimum, ECS recommends that all fleets proactively regenerate the Purifilter Plus M every 4 to 6 weeks.

2. The engine must be operated on ultra-low sulfur diesel fuel (ULSD) of 15 ppm or less.
3. The engine must be in proper operating condition, well maintained, and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
4. The vehicle may not be equipped with an oil burning system and lube oil or other oils may not be mixed with the fuel.
5. ECS installs a back-pressure monitor and logger unit and the remote driver display on all vehicles equipped with a Purifilter Plus M.

ECS estimates this device will incur no discernable fuel economy penalty when used in a compatible application.

If the Purifilter Plus M is modified from the application description provided to EPA and representative of products tested, you must notify EPA immediately. This verification does not automatically confer to modified devices or devices that are similar to this verification.

Information on the Purifilter Plus M, percent reductions, and applicable engines will be posted on the EPA's Verified Technology List website at:

<http://www.epa.gov/cleandiesel/verification/verif-list.htm>. As you know, ECS will be responsible for completing required in-use testing program and submitting all testing data to EPA as outlined in EPA's in-use test methods.

Thank you for participating in EPA's Technology Assessment Center Verification Program. If you have any questions or comments, please contact Julie Hawkins, of my staff, at (202) 343-9072.

Sincerely,



Jim Blubaugh, Deputy Director
Transportation and Climate Division
Office of Transportation and Air Quality